

mRNA. Re-expression of hNIS mRNA was achieved in all three of the papillary cell lines and one of the benign follicular adenomas under at least one treatment condition (Table 2). Figure 4, a and b, demonstrate the hNIS mRNA re-expression in cell lines KAK-1 and NPA'87, respectively.

# IN THE CLAIMS:

Please cancel claims 6 and 15.

Please amend claims 1, 7, 8, 10, 12, 13 and 16 as follows:

1. (Amended) A method of expressing a thyroid specific therapeutic response element in a human cancerous thyroid cell in which the response element was blocked from expression, comprising the step of administering an unblocking agent to the cancerous cell harboring a gene encoding the response element, thereby resulting in the expression of the response element, and wherein the unblocking agent is a demethylating or a differentiating agent.

7. (Amended) The method according to claim 5, wherein said unblocking agent is dimethylsulfoxide, sodium butyrate, phenylacetate, or 5-azacytidine.

8. (Amended) The method according to claim 5, wherein said unblocking agent is a compound that inhibits DNA-methyltransferase activity.

10. (Amended) The method of claim 1, wherein said unblocking agent is difluoromethylornithine or adenosyl-1,8-diamino-3-thio-octane.

12. (Amended) The method according to claim 1, wherein said response element is a sodium-iodide symporter.

13. (Amended) The method according to claim 12, wherein said response element is a human sodium-iodide symporter.